

### **Remarks/Arguments**

Claims 1 – 3 are presented for reconsideration and further examination in view of the foregoing amendments and following remarks. Claims 4 – 10 were withdrawn as being drawn to a non-elected species.

In the outstanding Office Action, the Examiner: objected to claim 1 due to informalities, and rejected claims 1 – 3 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0154420 to Magarill et al. (hereinafter referred to as “Magarill”) in view of U.S. Patent Application Publication No. 2002/0180932 to Shimizu et al. (hereinafter referred to as “Shimizu”).

By this Response and Amendment, claim 1 is amended, and the rejection under 35 U.S.C. 103 is traversed.

It is respectfully submitted that the above amendments do not introduce any new matter to this application within the meaning of 35 U.S.C. 132. Support for the amendments to claim 1 may be found in the specification and figures as originally filed, including *inter alia* FIG 2.

### **OBJECTION TO THE CLAIMS**

The Examiner objected to claim 1 for lacking the word “the” between the words “which” and “color” on page 41, line 18.

### **RESPONSE**

Applicants have made the suggested amendment, and inserted the word “the” appropriately. Accordingly, Applicants request that the Examiner withdraw the objection.

### REJECTION UNDER 35 U.S.C. 103(a)

The Examiner rejected claims 1 – 3 under 35 U.S.C. 103(a) as being unpatentable over Magarill in view of Shimizu.

### RESPONSE

To establish a *prima facie* case of obviousness, the Examiner must establish: (1) that some suggestion or motivation to modify the references exists; (2) a reasonable expectation of success; and (3) that the prior art references teach or suggest all of the claim limitations. *Amgen, Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991); *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 USPQ 494, 496 (CCPA 1970).

Applicants submit that all of the features of the presently claimed invention are not disclosed, taught or suggested in the cited prior art.

Independent claim 1 has been amended, and now recites a “projection display apparatus” comprising, *inter alia*, “first, second and third polarized light separating means,” “first, second and third reflective type spatial light modulating elements,” and “a lens for correcting astigmatism.” The “*first, second and third polarized light separating means comprise a wire grid polarized light separating plate, respectively,*” and the “lens for correcting astigmatism is disposed *near the side of the reflective surface of at least a reflective type spatial light modulating element* from among said first, second and third reflective type spatial light modulating elements, respectively.” (Present application, Claim 1, Emphasis Added)

Magarill is drawn to a method and apparatus for “accurately positioning the diagonal of an optical prism where the diagonal divides (or is adapted to divide) incident light into a transmitted portion and a reflected portion” (Magarill, ¶2). One embodiment of the method and apparatus employs “two prisms and two wire grid polarizers” (Magarill, ¶41) to divide the

incident light.

Applicants submit that Magarill fails to render the presently claimed invention obvious, as Magarill fails to disclose, teach, or suggest that the “first, second, and third polarized light separating means comprise a wire grid polarized light separating plate, respectively.” (Present application, Amended Claim 1). Magarill teaches only two wire grid polarizers (see Magarill, FIG. 5), whereas in the present application, the polarized light separating means of the entrance side (8), the polarized light separating means in front of the reflective type spatial light modulating element for red light (11), and the polarized light separating means in front of the reflective type spatial light modulating element for blue light (11) are all wire grids. A design comprising three wire grids for separating polarized light minimizes the need for polarized light beam splitter prisms, which are “the heaviest component within the apparatus” and which must be increased in size and weight to accommodate larger display elements (as noted in the Present Application, Original Specification, page 4, lines 1 – 5). Further, the wire grid has high light utilization and very high contrast, since its angular property is wide in comparison to a glass PBS-type prism. Thus, in the Present Application (and unlike in Magarill), total light utilization is maximized by the use of three wire grid filters.

The Examiner notes in the Office Action of March 13, 2006 that “Magarill does not appear to disclose ‘a lens for correcting astigmatism is disposed near the side of the reflective surface of at least one from among said first, second, and third reflective type spatial light modulating elements’.” The Examiner cites Shimizu to cure the deficits of Magarill, as Shimizu is drawn to a digital image projector which comprises a “beam-shaping / astigmatism-compensating lens 426...to compensate for astigmatism introduced by a tilted grid-support plate.” As seen in FIGS. 7 and 11, this lens is “positioned in the path of the linearly polarized

illumination beam.” (Shimizu, ¶81, see also ¶99).

Applicants submit that Shimizu fails to cure the deficiencies of Magarill, as it fails to disclose, teach, or suggest a “lens for correcting astigmatism...disposed *near the side of the reflective surface of at least a reflective type spatial light modulating element*.” (Present Application, Amended Claim 1, emphasis added). In the Present Application, astigmatism correcting lens (21) is placed near reflective type spatial light modulating element (14), and in contrast to Shimizu, not in the path of the illumination beam. In the present application, the astigmatism correcting lens (21) corrects the astigmatism caused by light passing from the reflective type spatial light modulating element (14) through the wire grid (11) and toward the projecting lens (6). In contrast, the astigmatism correcting lens in Shimizu is placed where it may perform distortion correction of the illumination beam (Shimizu, ¶81, ¶99).

Thus, Applicants submit that Shimizu fails to cure the deficiencies of Magarill, as it fails to disclose, teach, or suggest a “lens for correcting astigmatism...disposed *near the side of the reflective surface of at least a reflective type spatial light modulating element*” as set forth in Amended Claim 1.

Accordingly, applicants respectfully submit that the combination of Magarill and Shimizu fails to teach each of the claimed features, and that, as such, the Examiner has failed to make a *prima facie* case of obviousness.

Applicants note that U.S. Patent No. 6,873,469 to De Vaan et al. (hereinafter referred to as “De Vann”), cited by the Examiner as pertinent to the Applicants’ disclosure, also lacks a “lens for correcting astigmatism...disposed near the side of the reflective surface of at least a reflective type spatial light modulating element,” and thus does not cure the deficiencies of Magarill. Applicants submit that the “optical component configuration” described in De Vann

(col. 4, lines 14 – 23) is for “compensating the astigmatism in the output beam (O) created by the transparent plates.” Accordingly, Applicants submit that the combination of Magarill and De Vaan fails to teach each of the claimed features, and that, as such, the Examiner can not use Magarill and De Vaan to make a *prima facie* case of obviousness.

Applicants request that the Examiner reconsider and withdraw the rejections to independent claim 1, and claims 2 and 3 dependent therefrom.

### CONCLUSION

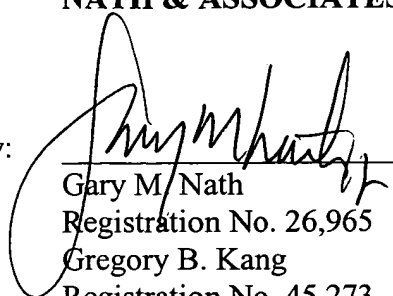
In light of the foregoing, Applicants submit that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Date: June 9, 2006  
NATH & ASSOCIATES PLLC  
112 South West Street  
Alexandria, VA 22314  
(703) 548-6284

Respectfully submitted,  
**NATH & ASSOCIATES PLLC**

By: \_\_\_\_\_

  
Gary M. Nath  
Registration No. 26,965  
Gregory B. Kang  
Registration No. 45,273  
Customer No. 20529